ecs
WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

30 Harris Place, Brattleboro, VT 05301 tel 802.257.1195 fax 802.257.1603 www.ecsconsult.com

Ms. Patricia Coppolino
Vermont Department
of Environmental Conservation
Sites Management Section
Brownfields Response Program
103 South Main Street
Waterbury, VT 05671-0404

May 12, 2011
Project No. 04-214807
Document No. 40191

RE: Summary Report
348 Center Street
Pownal, Vermont
SMS# 20043202

Dear Ms. Coppolino:

Environmental Compliance Services, Inc. (ECS) of Brattleboro, Vermont, has prepared this summary report detailing site investigation activities completed at 348 Center Street in Pownal, Vermont (the site). Site investigation activities included a level survey used to determine groundwater elevations at the site and groundwater sampling of the monitoring wells to determine subsurface impacts to groundwater. The objectives of this site investigation were to:

1. Survey and gauge all monitoring wells at the site to determine groundwater flow;
2. Collect a round of groundwater samples from all monitoring wells. Samples will be analyzed for Volatile Organic Compounds (VOCs) by EPA Method 82601B and 13 priority pollutant (PP13) metals. Samples will be collected utilizing EPA low flow methods;
3. Determine if offsite migration of groundwater contamination may be present and the potential for the overburden aquifer to impact the confined bedrock aquifer;
4. Assess the potential for contaminant impact on sensitive receptors; and
5. Submit a summary report that outlines the work performed, as well as provides conclusions and recommendations.

This work was performed under the terms, conditions, and rate schedule of ECS' American Recovery and Reinvestment Act (ARRA) funded Contract with the Vermont Department of Environmental Conservation (VTDEC). Figures 1 and 2 are included as a Site Locus and Site Plan respectively, as Attachment I.

SUMMARY OF SENSITIVE RECEPTOR AND LEVEL SURVEY

On November 8, 2010, ECS visited the site to survey the casing elevations of the existing monitoring wells and to assess sensitive receptors in the area. Of the five wells installed in 2006 by Tighe and Bond, only two could be located (MW-2 and MW-5). The remaining wells could not be found, even with the assistance of a metal detector. It is believed that MW-1 has been paved over, as a strong magnetic signal was observed by our metal detector and concrete was observed in the area under some broken up pavement where this well should have been located. Well MW-3 may have been disturbed or damaged

during the reported installation of a new water line between the well house and the commercial building along the road, or during septic line upgrades between the house and the newly-installed sewer line in the street. MW-4 could not be located using the metal detector.

In surveying the elevations of wells MW-2 and MW-5, it was determined that, assuming the top of the PVC well casing (TPVC) elevation of MW-5 was the same as established by Tighe and Bond in their 2007 report, the TPVC elevation of well MW-2 was approximately 0.2 feet higher in elevation. Water level measurements, and elevations calculated from these data, indicate groundwater to be flowing in the general direction from MW-2 toward MW-5. However, because a third monitoring well was not available to be surveyed, the specific direction of groundwater flow could not be calculated by typical triangulation techniques. Table 1 below summarizes the survey data collected on November 8, 2010.

TABLE 1
348 Center Street, Pownal, VT
Summary of Monitoring Well and Groundwater Elevations

WELL ID	Elevation of TPVC (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)
MW-2	1000.91	3.22	997.69
MW-5	1002.14	4.82	997.32

SUMMARY OF GROUNDWATER SAMPLING

ECS conducted a groundwater sampling event on December 2, 2010. Groundwater samples were collected from select monitoring wells following standard low-flow sampling protocols using disposable polyethylene sample tubing. Prior to sampling, the depth to water was measured in each monitoring well utilizing a Solinst Oil Interface Probe. Groundwater samples were collected in laboratory-supplied containers and transferred to Spectrum Analytical of Agawam, Massachusetts following standard chain-of-custody protocol. Copies of the groundwater sampling logs are provided in Attachment II which provide details of sampling flow rates. The laboratory reports and chain-of-custody records are provided as Attachment III.

Groundwater samples were collected at monitoring wells MW-2 and MW-5. These samples were submitted to Spectrum for Volatile Organic Compounds (VOC) analysis via EPA Method 8260B Vermont Scan and the 13 Priority Pollutant Metals (PP-13) analysis (total metals).

GROUNDWATER SAMPLING RESULTS

In summary VOC compounds were detected in MW-5 at concentrations exceeding the Vermont Preventative Action Level (VTPAL) and Vermont Enforcement Standards (VTES). Laboratory analytical results are summarized in Table 2 in Attachment IV. The following summarizes the groundwater sampling results:

The following compounds exceeded VTPAL and VTES:

- MW-5 - benzene (14.6 μg/L) and naphthalene (30.1 μg/L).

The following compounds were detected above laboratory detection limits but below VTPAL and VTES:

- MW-5 – ethylbenzene (248 µg/L), toluene (89.9 µg/L), total xylenes (212 µg/L), 1,2,4-Trimethylbenzene (209 µg/L) and 1,3,5-Trimethylbenzene (36.4 µg/L).

No VOC compounds were detected above laboratory detection limits in MW-2.

Trace metal compounds were detected above laboratory detection limits in MW-5 and MW-2; however, these concentrations did not exceed VTPAL or VTES:

- MW-5 – arsenic (0.0065 µg/L), nickel (0.005 µg/L) and zinc (0.0222 µg/L); and
- MW-2 – zinc (0.0238 µg/L).

CONCLUSIONS AND RECOMMENDATIONS

ECS makes the following conclusions and recommendations based on the results of this investigation:

Determine if offsite migration of groundwater contamination may be present and the potential for the overburden aquifer to impact the confined bedrock aquifer.

Because many of the previously existing wells could not be located and may have been destroyed, the extent of the plume beyond the site boundaries cannot be determined based on the assessment actives conducted as part of this investigation, as VOCs were only detected in MW-5 and there are no other downgradient wells. Well MW-2 is located upgradient of the former UST location; no compounds indicative of contamination were detected in the groundwater sample from this well.

Any potential impact to bedrock cannot be determined using the existing monitoring well network. Based on data from Tighe and Bond's phase 1 site assessment completed in 2006 at the site, the depth to bedrock in this area is approximately 8.5 feet. Due to the shallow depth of bedrock there is a possibility that the bedrock aquifer has been impacted.

Concentrations of the VOCs benzene and naphthalene were detected above enforcement standards in groundwater samples collected from MW-5 in December 2010. As presented on Table 2, concentrations of these VOCs have increased since groundwater samples were collected in 2006. This may have been due to higher groundwater elevations (3.44 fbg on 12/2/2010 as compared to 6.43 fbg on 10/18/2006).

Assess the potential for contaminant impact on sensitive receptors.

Monitoring well MW-5 is roughly 30 feet from a commercial site building. Since groundwater is shallow (within three to four feet), there is a possibility that VOC vapor intrusion may be an issue in the commercial building. Furthermore, monitoring well MW-5 is also located within approximately 100 yards of a small wetland. Since surface water samples were not collected, the impact to the wetlands is unknown.

Total metals concentrations in groundwater show a decrease between the 2010 and 2006 sampling events. This could be due to the manner in which groundwater samples were collected (e.g., bailer sampling versus low-flow sampling) or the fact that metals in soil were removed during removal of the underground storage tank (UST), thereby reducing the concentrations of metals in the groundwater.

Based on these conclusions, ECS makes the following recommendations:

1. Install a replacement monitoring well for MW-1, and install one new well downgradient of MW-5 near the edge of the wetland. Sampling these wells will allow evaluation of current groundwater concentrations downgradient of the area of greatest impact, specifically the wetland area. Furthermore, water level measurements from these wells will help to establish the actual groundwater flow direction.
2. Install a shallow piezometer at the edge of the wetlands to allow determination of any vertical hydraulic gradient that may be present at the wetland. By measuring the water level inside the piezometer and comparing it to the water level of the water body outside the piezometer, a determination of vertical hydraulic gradient can be made. The piezometer would be constructed of a three-foot long drive point coupled to a length of iron pipe, with the point driven into the sediments of the wetland to a total depth of between three and six feet.
3. Complete an elevation survey of new wells and piezometer to allow accurate calculation of water level elevations.
4. Collect groundwater samples using low-flow sampling methods from all new and existing wells at the site. Collect a sample of the surface water in the wetland. Samples should be analyzed for VOCs and metals. Water level measurements should be collected from the wells and the surface water of the wetland to evaluate groundwater flow conditions.
5. Complete a boring to the top of bedrock or into bedrock and install a monitoring well to allow evaluation of groundwater quality at the bedrock surface or in the bedrock aquifer. This would only be necessary if a downward hydraulic gradient were present at the site. The presence of a downward gradient could be established by installing a well couplet at one of the monitoring well locations.

Thank you for the opportunity to present the results of this investigation. If you have any questions, please do not hesitate to contact me.

Sincerely,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.

Richard P. Geisler

Richard P. Geisler, P.G., LSP
Senior Hydrogeologist/Branch Manager

RPG/kab
Attachments

ATTACHMENT I

SITE LOCUS (FIGURE 1) & SITE PLAN (FIGURE 2)

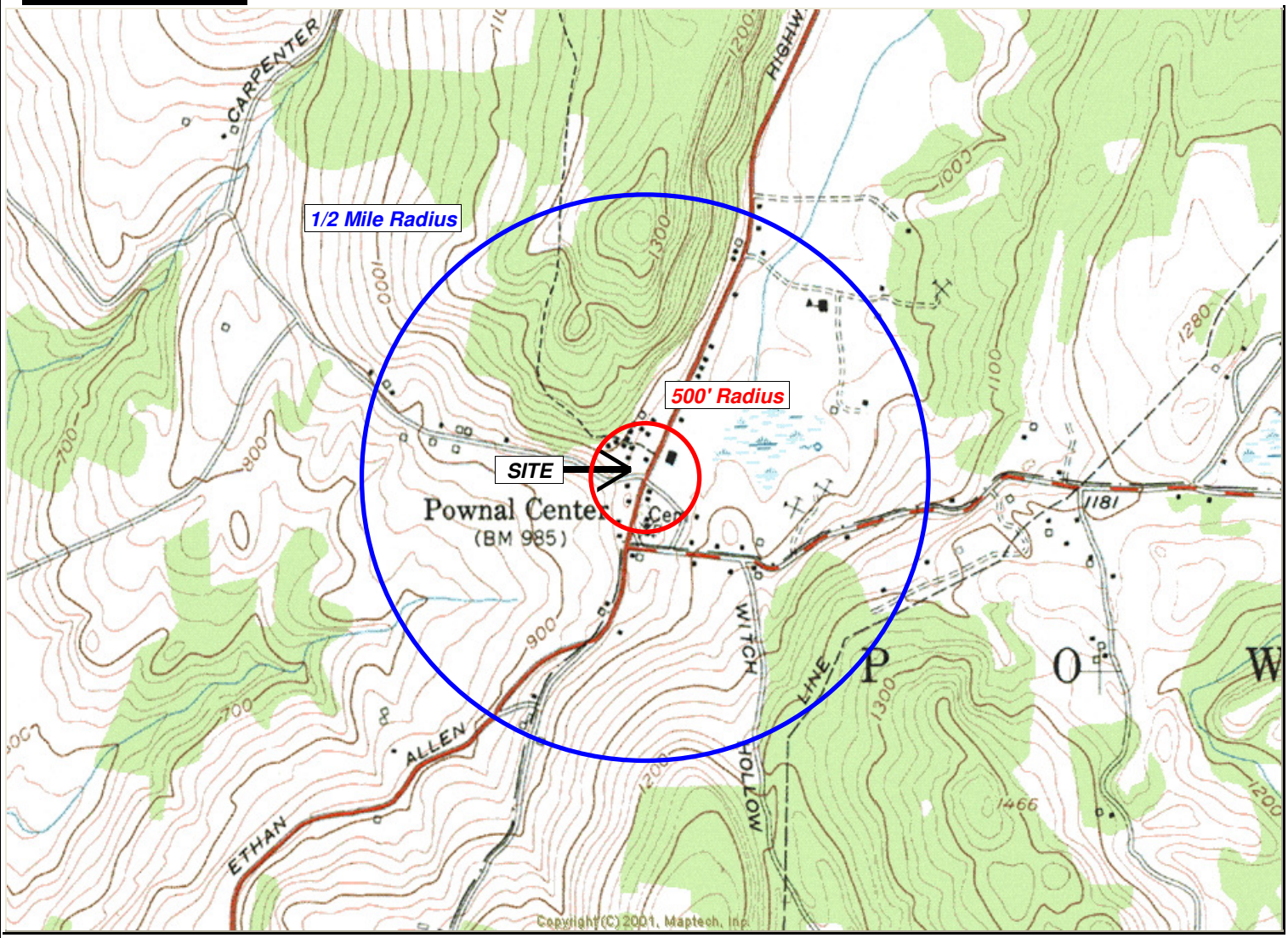
Environmental Compliance Services, Inc.
30 Harris Place, Brattleboro, VT 05301
Phone (802)-257-1195 Fax (802)-257-1603
www.ecsconsult.com

SITE LOCUS

Figure: 1

384 Center Street, Pownal, VT
384 Center Street
Pownal, VT
05201

Job Number: 04-214807



1 1/2 0 1 Mile

1 inch = 1500 feet

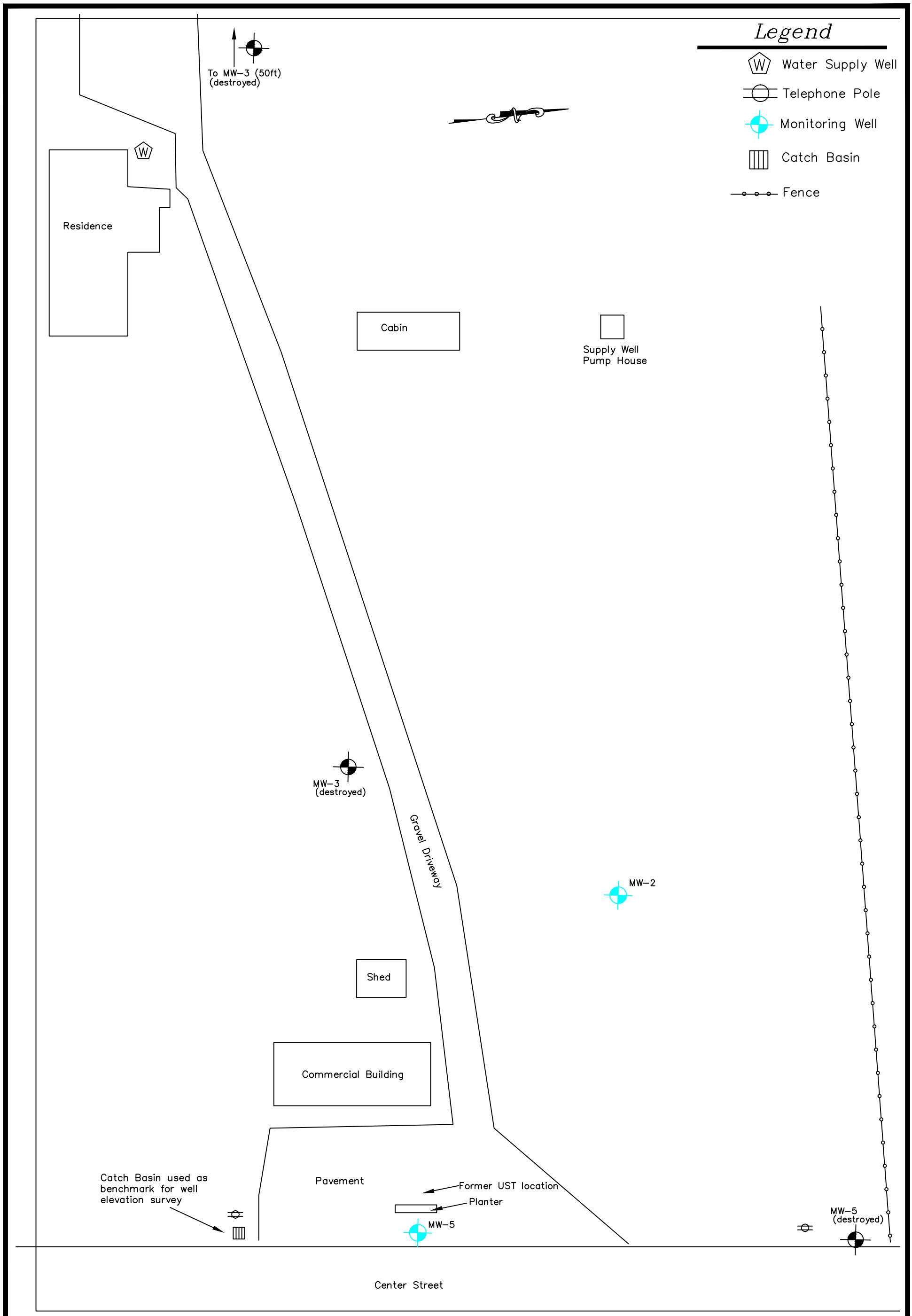
Contour Interval: 20 Feet

North

Base Map: U.S. Geological Survey; Quadrangle Location: Pownal, Vermont

Latitude and Longitude: 042d 47" 47.40' North / 073d 13" 26.14' West

Map Edited: 1954 *Map Revised: None* *Generated By: HH*



588 Silver Street * Agawam, MA 01001
Phone: 1-800-789-3530 Fax: 413-789-2776

CLIENT: Vermont DEC

GRAPHIC SCALE: 0 0 0 0 0

PROJECT: Site Investigation
348 Center Street
Pownal, Vermont

TITLE: SITE PLAN

COMPUTER CADFILE : 214309 SITE PLAN

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
WV	WV	LG	RPG
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
NTS	Jan 2011	214807	2

ATTACHMENT II

GROUNDWATER SAMPLING LOGS

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: 348 Center St., Poultney VT
Project No.: 04-21807
Date: 12/2/10
Weather: Cloudy 40s

Well ID: MW-5
Sample ID: MW-5
Sampler: W. Verman

Well Condition Observations	
Protective Casing:	
Lock:	
Label:	Good
Surface Seal:	
PVC Well Casing:	

Well Volume Calculations	
Well Diameter:	1"
Depth to Water:	3.44
Total Depth:	9.85
Volume Purged:	2.0gal

Pump Start: 10:50

TIME	DEPTH TO WATER (feet)	pH (SU)	TEMP (C)	SPECIFIC CONDUCTANCE (mS/cm) (µS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)
10:50	3.44	6.90	9.66	0.674	6.01	-55.7	
10:53		6.81	9.16	0.658	3.19	-44.6	
10:56		6.70	9.30	0.674	2.35	-46.8	
10:59		6.77	9.62	0.703	2.43	-67.5	
11:02		6.78	9.82	0.706	3.75	-72.4	
11:05		6.78	9.72	0.708	3.50	-71.2	
11:08		6.79	9.71	0.707	3.01	-71.5	
11:11		6.79	9.65	0.706	2.99	-71.3	
11:14	3.45	6.80	9.61	0.705	3.08	-70.0	15.3
		Sample taken @ 11:15					
Stabilization Criteria	Drawdown < 0.3'	+/- 0.1 units	3%	3%	10%	+/- 10 mv	10%

Sampling/Purging Equipment	
Water Level Meter:	Solinist IP disk
pH/S.C./Dissolved Oxygen/ORP:	YSI 556 MPS
Turbidity:	2100P Turbidimeter
Pump:	Geopump

Laboratory Analyses/Containers		
Container	Preservative	Analysis
3 VOA	HCl	VOCs
1 500ml	HNO_3	PPIs

Sample Time: 11:15

Comments: Unable to take DTW continously due to 1" pvc well pump pumping ≈ @ 200 ml/min
- odor

Notes: MW-1 - appears to have been paved over
MW-3 - may have been dug up during the installation of a water line in 2009
MW-4 - unable to locate

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site:	348 Center St, Pownal, VT	**Well ID:**	MW-2
Project No.:	04-214807	**Sample ID:**	MW-2
Date:	12/2/10	**Sampler:**	W. Vermilya
Weather:	Cloudy 30's		

Well Condition Observations	
Protective Casing:	
Lock:	
Label:	Good
Surface Seal:	
PVC Well Casing:	

Well Volume Calculations	
Well Diameter:	1"
Depth to Water:	—
Total Depth:	8.54
Volume Purged:	

Pump Start:	11:57

TIME	DEPTH TO WATER (feet)	pH (SU)	TEMP (C)	SPECIFIC CONDUCTANCE (mS/cm) (µS/cm)	DISSOLVED OXYGEN (mg/l)	ORP (mv)	TURBIDITY (NTU)
11:59	—	7.72	7.61	0.201	10.83	-48.9	
12:02		7.67	6.48	0.196	10.63	-22.6	
12:05		7.50	5.86	0.193	10.49	-0.2	
12:08		7.42	5.63	0.192	10.36	13.4	
12:11		7.42	5.60	0.192	10.35	16.9	
12:14		7.41	5.58	0.191	10.27	21.5	
12:17		7.44	5.58	0.191	10.25	23.1	
12:20	—	7.43	5.58	0.191	10.21	26.8	14.2
				Sample taken @ 12:21			
Stabilization Criteria	Drawdown < 0.3'	+/- 0.1 units	3%	3%	10%	+/- 10 mv	10%

Sampling/Purging Equipment	
Water Level Meter:	Solinst Interface Meter
pH/S.C./Dissolved Oxygen/ORP:	YSI 556 MPS
Turbidity:	2100Q Turbidimeter
Pump:	Geopump 2

Laboratory Analyses/Containers		
Container	Preservative	Analysis
3 VOA	HCl	VOCs
1 Soil	HNO_3	PP 13

Sample Time:	

Comments: - DTW is at top of PVC casing well is submerged
- pump pumping @ ~200 ml/min
- no odor

ATTACHMENT III

LABORATORY ANALYTICAL REPORT

Report Date:
20-Dec-10 13:52

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Environmental Compliance Services
30 Harris Place
Brattleboro, VT 05301
Attn: Richard Geisler

Project: 348 Center St-Pownal, VT
Project #: 04-214807

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB22024-01	MW-5	Ground Water	02-Dec-10 11:15	06-Dec-10 11:10
SB22024-02	MW-2	Ground Water	02-Dec-10 12:21	06-Dec-10 11:10
SB22024-03	Trip	Deionized Water	02-Dec-10 09:00	06-Dec-10 11:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.
Please note that this report contains 11 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

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CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 2.6 degrees Celsius. The condition of these samples was further noted as refrigerated. The samples were transported on ice to the laboratory facility and the temperature was recorded at 0.8 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 6010C

Duplicates:

1025933-DUP1 *Source: SB22024-01*

Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Arsenic

SW846 8260B/C

Laboratory Control Samples:

1026102-BSD1

LCS/LCSD were analyzed in place of MS/MSD.

Samples:

S011258-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Methyl tert-butyl ether (25.1%)

This affected the following samples:

1026102-BLK1
1026102-BS1
1026102-BSD1
MW-2
MW-5
Trip

SB22024-01 *MW-5*

Elevated Reporting Limits due to the presence of high levels of non-target analytes.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	04-214807	Ground Water	02-Dec-10 11:15	06-Dec-10
SB22024-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
Volatile Organic Compounds by 8260B Prepared by method SW846 5030 Water MS			R05									
71-43-2	Benzene	14.9		µg/l	10.0	10	SW846 8260B/C	16-Dec-10	16-Dec-10	EQ	1026102	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	5.0	10	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	10.0	10	"	"	"	"	"	
100-41-4	Ethylbenzene	248		µg/l	10.0	10	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	10.0	10	"	"	"	"	"	
91-20-3	Naphthalene	30.1		µg/l	10.0	10	"	"	"	"	"	
108-88-3	Toluene	89.9		µg/l	10.0	10	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	209		µg/l	10.0	10	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	36.4		µg/l	10.0	10	"	"	"	"	"	
179601-23-1	m,p-Xylene	188		µg/l	20.0	10	"	"	"	"	"	
95-47-6	o-Xylene	24.4		µg/l	10.0	10	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*94*			*70-130 %*		"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods												
	Preservation	Field Preservec		N/A		1	EPA 200/6000 methods	08-Dec-10	08-Dec-10	EDT	1025359	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010C	16-Dec-10	16-Dec-10	HB	1025933	X
7440-38-2	Arsenic	0.0065		mg/l	0.0050	1	"	"	17-Dec-10	"	"	X
7440-41-7	Beryllium	BRL		mg/l	0.0020	1	"	"	16-Dec-10	"	"	X
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"	X
7440-47-3	Chromium	BRL		mg/l	0.0060	1	"	"	"	"	"	X
7440-50-8	Copper	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7440-02-0	Nickel	0.0050		mg/l	0.0050	1	"	"	"	"	"	X
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"	X
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	"	"	"	X
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	"	"	"	X
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0222		mg/l	0.0050	1	"	"	"	"	"	X
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	16-Dec-10	17-Dec-10	ARF	1025934	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-2	04-214807	Ground Water	02-Dec-10 12:21	06-Dec-10
SB22024-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds												
Volatile Organic Compounds by 8260B Prepared by method SW846 5030 Water MS												
71-43-2	Benzene	BRL		µg/l	1.0	1	SW846 8260B/C	16-Dec-10	16-Dec-10	EQ	1026102	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*98*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*98*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*105*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*			*70-130 %*		"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods												
	Preservation	Field Preservec		N/A		1	EPA 200/6000 methods	08-Dec-10	08-Dec-10	EDT	1025359	
Total Metals by EPA 6000/7000 Series Methods												
7440-22-4	Silver	BRL		mg/l	0.0050	1	SW846 6010C	16-Dec-10	16-Dec-10	HB	1025933	X
7440-38-2	Arsenic	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7440-41-7	Beryllium	BRL		mg/l	0.0020	1	"	"	"	"	"	X
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"	X
7440-47-3	Chromium	BRL		mg/l	0.0060	1	"	"	"	"	"	X
7440-50-8	Copper	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7440-02-0	Nickel	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7439-92-1	Lead	BRL		mg/l	0.0075	1	"	"	"	"	"	X
7440-36-0	Antimony	BRL		mg/l	0.0060	1	"	"	"	"	"	X
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	"	"	"	X
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0238		mg/l	0.0050	1	"	"	"	"	"	X
Total Metals by EPA 200 Series Methods												
7439-97-6	Mercury	BRL		mg/l	0.00020	1	EPA 245.1/7470A	16-Dec-10	17-Dec-10	ARF	1025934	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip	04-214807	Deionized Water	02-Dec-10 09:00	06-Dec-10
SB22024-03				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds												
Volatile Organic Compounds by 8260B Prepared by method SW846 5030 Water MS												
71-43-2	Benzene	BRL		µg/l	1.0	1	SW846 8260B/C	16-Dec-10	16-Dec-10	naa	1026102	
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/l	0.5	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	BRL		µg/l	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	BRL		µg/l	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-88-3	Toluene	BRL		µg/l	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/l	1.0	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	BRL		µg/l	2.0	1	"	"	"	"	"	
95-47-6	o-Xylene	BRL		µg/l	1.0	1	"	"	"	"	"	
Surrogate recoveries:												
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*		"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*		"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*107*			*70-130 %*		"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*90*			*70-130 %*		"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1026102 - SW846 5030 Water MS										
Blank (1026102-BLK1)					Prepared & Analyzed: 16-Dec-10					
Benzene	BRL		µg/l	1.0						
Chlorobenzene	BRL		µg/l	1.0						
1,2-Dibromoethane (EDB)	BRL		µg/l	0.5						
1,2-Dichloroethane	BRL		µg/l	1.0						
1,1-Dichloroethene	BRL		µg/l	1.0						
Ethylbenzene	BRL		µg/l	1.0						
Methyl tert-butyl ether	BRL		µg/l	1.0						
Naphthalene	BRL		µg/l	1.0						
Toluene	BRL		µg/l	1.0						
Trichloroethene	BRL		µg/l	1.0						
1,2,4-Trimethylbenzene	BRL		µg/l	1.0						
1,3,5-Trimethylbenzene	BRL		µg/l	1.0						
m,p-Xylene	BRL		µg/l	2.0						
o-Xylene	BRL		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*29.6*		µg/l		*30.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*30.5*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*32.2*		µg/l		*30.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*29.2*		µg/l		*30.0*		*97*	*70-130*		
LCS (1026102-BS1)					Prepared & Analyzed: 16-Dec-10					
Benzene	17.9		µg/l		20.0		90	70-130		
1,2-Dibromoethane (EDB)	21.4		µg/l		20.0		107	70-130		
1,2-Dichloroethane	18.5		µg/l		20.0		92	70-130		
Ethylbenzene	17.6		µg/l		20.0		88	70-130		
Methyl tert-butyl ether	23.9		µg/l		20.0		120	70-130		
Naphthalene	20.0		µg/l		20.0		100	70-130		
Toluene	17.8		µg/l		20.0		89	70-130		
1,2,4-Trimethylbenzene	18.5		µg/l		20.0		93	70-130		
1,3,5-Trimethylbenzene	18.8		µg/l		20.0		94	70-130		
m,p-Xylene	35.0		µg/l		40.0		88	70-130		
o-Xylene	17.3		µg/l		20.0		86	70-130		
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.5*		µg/l		*30.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*29.2*		µg/l		*30.0*		*97*	*70-130*		
LCS Dup (1026102-BSD1)		QM10			Prepared & Analyzed: 16-Dec-10					
Benzene	18.8		µg/l		20.0		94	70-130	5	30
1,2-Dibromoethane (EDB)	22.1		µg/l		20.0		111	70-130	4	25
1,2-Dichloroethane	21.7		µg/l		20.0		109	70-130	16	25
Ethylbenzene	18.7		µg/l		20.0		94	70-130	6	30
Methyl tert-butyl ether	24.8		µg/l		20.0		124	70-130	3	30
Naphthalene	20.4		µg/l		20.0		102	70-130	2	30
Toluene	18.2		µg/l		20.0		91	70-130	2	30
1,2,4-Trimethylbenzene	19.5		µg/l		20.0		97	70-130	5	30
1,3,5-Trimethylbenzene	19.2		µg/l		20.0		96	70-130	2	30
m,p-Xylene	37.2		µg/l		40.0		93	70-130	6	30
o-Xylene	17.9		µg/l		20.0		89	70-130	3	30
Surrogate: 4-Bromofluorobenzene	*29.2*		µg/l		*30.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*29.7*		µg/l		*30.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*31.4*		µg/l		*30.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*29.7*		µg/l		*30.0*		*99*	*70-130*		

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1026102 - SW846 5030 Water MS										
Matrix Spike (1026102-MS1)			**Source: SB22024-02**		Prepared & Analyzed: 16-Dec-10					
Benzene	22.2		µg/l		20.0	BRL	111	70-130		
Chlorobenzene	20.3		µg/l		20.0	BRL	102	70-130		
1,1-Dichloroethene	25.3		µg/l		20.0	BRL	127	70-130		
Toluene	22.1		µg/l		20.0	0.5	108	70-130		
Trichloroethene	23.7		µg/l		20.0	BRL	118	70-130		
Surrogate: 4-Bromofluorobenzene	*30.2*		µg/l		*30.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*30.4*		µg/l		*30.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*34.8*		µg/l		*30.0*		*116*	*70-130*		
Surrogate: Dibromofluoromethane	*29.6*		µg/l		*30.0*		*99*	*70-130*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1025933 - SW846 3005A										
Blank (1025933-BLK1)					Prepared & Analyzed: 16-Dec-10					
Nickel	BRL		mg/l	0.0050						
Zinc	BRL		mg/l	0.0050						
Thallium	BRL		mg/l	0.0050						
Selenium	BRL		mg/l	0.0150						
Antimony	BRL		mg/l	0.0060						
Lead	BRL		mg/l	0.0075						
Arsenic	BRL		mg/l	0.0050						
Chromium	BRL		mg/l	0.0060						
Beryllium	BRL		mg/l	0.0020						
Silver	BRL		mg/l	0.0050						
Cadmium	BRL		mg/l	0.0025						
Copper	BRL		mg/l	0.0050						
LCS (1025933-BS1)					Prepared & Analyzed: 16-Dec-10					
Nickel	1.33		mg/l	0.0050	1.25		107	85-115		
Lead	1.27		mg/l	0.0075	1.25		102	85-115		
Antimony	1.29		mg/l	0.0060	1.25		104	85-115		
Selenium	1.32		mg/l	0.0150	1.25		105	85-115		
Thallium	1.24		mg/l	0.0050	1.25		99	85-115		
Zinc	1.37		mg/l	0.0050	1.25		109	85-115		
Arsenic	1.29		mg/l	0.0050	1.25		103	85-115		
Chromium	1.32		mg/l	0.0060	1.25		106	85-115		
Copper	1.24		mg/l	0.0050	1.25		100	85-115		
Beryllium	1.31		mg/l	0.0020	1.25		105	85-115		
Silver	1.23		mg/l	0.0050	1.25		99	85-115		
Cadmium	1.39		mg/l	0.0025	1.25		111	85-115		
LCS Dup (1025933-BSD1)					Prepared & Analyzed: 16-Dec-10					
Thallium	1.22		mg/l	0.0050	1.25		98	85-115	1	20
Nickel	1.30		mg/l	0.0050	1.25		104	85-115	2	20
Lead	1.25		mg/l	0.0075	1.25		100	85-115	2	20
Selenium	1.29		mg/l	0.0150	1.25		103	85-115	2	20
Zinc	1.34		mg/l	0.0050	1.25		107	85-115	2	20
Antimony	1.27		mg/l	0.0060	1.25		101	85-115	2	20
Copper	1.23		mg/l	0.0050	1.25		98	85-115	1	20
Silver	1.22		mg/l	0.0050	1.25		97	85-115	1	20
Arsenic	1.26		mg/l	0.0050	1.25		101	85-115	2	20
Beryllium	1.30		mg/l	0.0020	1.25		104	85-115	1	20
Cadmium	1.36		mg/l	0.0025	1.25		109	85-115	2	20
Chromium	1.30		mg/l	0.0060	1.25		104	85-115	1	20
Duplicate (1025933-DUP1)			**Source: SB22024-01**		Prepared & Analyzed: 16-Dec-10					
Nickel	0.0053		mg/l	0.0050		0.0050			5	20
Zinc	0.0218		mg/l	0.0050		0.0222			2	20
Thallium	BRL		mg/l	0.0050		BRL				20
Lead	BRL		mg/l	0.0075		BRL				20
Selenium	BRL		mg/l	0.0150		BRL				20
Antimony	BRL		mg/l	0.0060		BRL				20
Chromium	BRL		mg/l	0.0060		BRL				20
Copper	BRL		mg/l	0.0050		BRL				20
Cadmium	0.0004	J	mg/l	0.0025		0.0004			0	20
Beryllium	BRL		mg/l	0.0020		BRL				20
Arsenic	0.0043	J,QR8	mg/l	0.0050		0.0065			41	20
Silver	BRL		mg/l	0.0050		BRL				20

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1025933 - SW846 3005A										
Matrix Spike (1025933-MS1)			**Source: SB22024-02**		Prepared & Analyzed: 16-Dec-10					
Thallium	1.24		mg/l	0.0050	1.25	BRL	99	75-125		
Nickel	1.28		mg/l	0.0050	1.25	0.0012	102	75-125		
Lead	1.24		mg/l	0.0075	1.25	BRL	99	75-125		
Selenium	1.28		mg/l	0.0150	1.25	BRL	102	75-125		
Zinc	1.35		mg/l	0.0050	1.25	0.0238	106	75-125		
Antimony	1.27		mg/l	0.0060	1.25	BRL	101	75-125		
Beryllium	1.28		mg/l	0.0020	1.25	BRL	103	75-125		
Arsenic	1.26		mg/l	0.0050	1.25	BRL	101	75-125		
Cadmium	1.34		mg/l	0.0025	1.25	BRL	107	75-125		
Chromium	1.30		mg/l	0.0060	1.25	BRL	104	75-125		
Copper	1.26		mg/l	0.0050	1.25	0.0022	100	75-125		
Silver	1.23		mg/l	0.0050	1.25	BRL	99	75-125		
Matrix Spike Dup (1025933-MSD1)			**Source: SB22024-02**		Prepared & Analyzed: 16-Dec-10					
Antimony	1.26		mg/l	0.0060	1.25	BRL	101	75-125	0.5	20
Selenium	1.28		mg/l	0.0150	1.25	BRL	102	75-125	0.08	20
Nickel	1.27		mg/l	0.0050	1.25	0.0012	102	75-125	0.3	20
Thallium	1.23		mg/l	0.0050	1.25	BRL	98	75-125	0.4	20
Lead	1.24		mg/l	0.0075	1.25	BRL	99	75-125	0.1	20
Zinc	1.34		mg/l	0.0050	1.25	0.0238	106	75-125	0.4	20
Chromium	1.30		mg/l	0.0060	1.25	BRL	104	75-125	0.2	20
Copper	1.25		mg/l	0.0050	1.25	0.0022	100	75-125	0.5	20
Cadmium	1.34		mg/l	0.0025	1.25	BRL	107	75-125	0.1	20
Beryllium	1.29		mg/l	0.0020	1.25	BRL	103	75-125	0.04	20
Silver	1.23		mg/l	0.0050	1.25	BRL	98	75-125	0.3	20
Arsenic	1.26		mg/l	0.0050	1.25	BRL	101	75-125	0.4	20
Post Spike (1025933-PS1)			**Source: SB22024-02**		Prepared & Analyzed: 16-Dec-10					
Zinc	1.26		mg/l	0.0050	1.25	0.0238	99	80-120		
Nickel	1.19		mg/l	0.0050	1.25	0.0012	95	80-120		
Thallium	1.16		mg/l	0.0050	1.25	BRL	93	80-120		
Selenium	1.19		mg/l	0.0150	1.25	BRL	95	80-120		
Antimony	1.16		mg/l	0.0060	1.25	BRL	92	80-120		
Lead	1.17		mg/l	0.0075	1.25	BRL	93	80-120		
Beryllium	1.20		mg/l	0.0020	1.25	BRL	96	80-120		
Copper	1.17		mg/l	0.0050	1.25	0.0022	94	80-120		
Cadmium	1.26		mg/l	0.0025	1.25	BRL	101	80-120		
Arsenic	1.18		mg/l	0.0050	1.25	BRL	94	80-120		
Silver	1.16		mg/l	0.0050	1.25	BRL	93	80-120		
Chromium	1.23		mg/l	0.0060	1.25	BRL	98	80-120		

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1025934 - EPA200/SW7000 Series										
Blank (1025934-BLK1)						Prepared: 16-Dec-10 Analyzed: 17-Dec-10				
Mercury	BRL		mg/l	0.00020						
LCS (1025934-BS1)						Prepared: 16-Dec-10 Analyzed: 17-Dec-10				
Mercury	0.00530		mg/l	0.00020	0.00500		106	85-115		
Duplicate (1025934-DUP1)			**Source: SB22024-01**			Prepared: 16-Dec-10 Analyzed: 17-Dec-10				
Mercury	BRL		mg/l	0.00020		BRL				20
Matrix Spike (1025934-MS1)			**Source: SB22024-02**			Prepared: 16-Dec-10 Analyzed: 17-Dec-10				
Mercury	0.00522		mg/l	0.00020	0.00500	BRL	104	75-125		
Matrix Spike Dup (1025934-MSD1)			**Source: SB22024-02**			Prepared: 16-Dec-10 Analyzed: 17-Dec-10				
Mercury	0.00523		mg/l	0.00020	0.00500	BRL	105	75-125	0.2	20
Post Spike (1025934-PS1)			**Source: SB22024-02**			Prepared: 16-Dec-10 Analyzed: 17-Dec-10				
Mercury	0.00497		mg/l	0.00020	0.00500	BRL	99	85-115		

Notes and Definitions

QM10	LCS/LCSD were analyzed in place of MS/MSD.
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic

Validated by:
Hanibal C. Tayeh, Ph.D.
Nicole Leja

SB 22024 (AW)

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ECS Bratt
30 Harris Place
Brattleboro, VT 05301

Telephone #: 802-257-1195
Project Mgr. Rich Geisler

Invoice To: ECS Agawam
588 Silver St.
Agawam, MA 01001

P.O. No.: _____ RQN: 0002

Project No.: S 04-214807
Site Name: 348 Center St.
Location: Pownal, VT State: VT
Sampler(s): W. Vermon

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Ice 10= _____ 11= _____

List preservative code below: 2,9 4,9

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= Diwater X2= _____ X3= _____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: 8260 VT Scan (8021B VOCs)	Total PP13 Metals						
SB22024-01	MW-5	12/2/10	11:15	G	GW	3		1	1	X	X						
-02	MW-2	↓	12:21	G	GW	3		1	1	X	X						
-03	TRIP	↓	9:00	G	X1	1				X							

QA/QC Reporting Notes: (check as needed)
- [ ] Provide MA DEP MCP CAM Report
- [ ] Provide CT DPH RCP Report

QA/QC Reporting Level
- [x] Standard
- [ ] No QC
- [ ] Other _____

State specific reporting standards: VT

Relinquished by:	Received by:	Date:	Time:	Temp°C
		12/6/10	9:25	2.6
		12/6/10	11:10	0.8

- [ ] EDD Format _____
- [x] E-mail to rgeisler@ecsconsult.com
  lgustafson@ecsconsult.com

- [ ] Ambient [ ] Iced [x] Refrigerated [ ] Fridge temp ___ °C [ ] Freezer temp ___ °C

ATTACHMENT IV

TABLE 2 – GROUNDWATER RESULTS SUMMARY TABLE

Table 2 - Groundwater Sampling Results

348 Center Street, Pownal, VT

Groundwater Sample ID/Sampling Date			MW-5	MW-5	MW-5	MW-2	MW-2	MW-2
	Primary Groundwater Quality Standards		12/2/2010	10/18/2006*	10/18/2006*	12/2/2010	10/18/2006*	10/18/2006*
	Preventive Action Level	VT Enforcement Standard						
Compounds Analyzed (µg/l)			VOCs	VOCs	SVOCs	VOCs	VOCs	SVOCs
Benzene	**0.5**	**5**	**14.6**	**4.1**	NA	BRL (<1.0)	BRL (<0.57)	NA
Ethylbenzene	**350**	**700**	248	33	NA	BRL (<1.0)	0.65J	NA
Isopropylbenzene	**NS**	**NS**	NA	3.1	NA	NA	BRL (<0.51)	NA
4-Isopropyltoluene	**NS**	**NS**	NA	1.4	NA	NA	BRL (<0.55)	NA
2-Methylnapthelene	**NS**	**NS**	NA	NA	24.0	NA	NA	BRL (<2.1)
Naphthalene	**10**	**20**	**30.1**	**6.8**	**78.0**	BRL (<1.0)	BRL (<0.53)	BRL (<1.7)
n-Proplybenzene	**NS**	**NS**	NA	8.4	NA	NA	BRL (<0.53)	NA
Toluene	**500**	**1,000**	89.9	32	NA	BRL (<1.0)	0.58J	NA
1,2,4-Trimethylbenzene	**NS**	**350**	209	41	NA	BRL (<1.0)	BRL (<0.49)	NA
1,3,5 Trimethylbenzene			36.4	14	NA	BRL (<1.0)	BRL (<0.48)	NA
Total Xylene	**5,000**	**10,000**	212.4	65	NA	BRL (<3.0)	BRL (<0.62)	NA
13 Priority Pollutant Total Metals (mg/L)								
Antimony	**3**	**6**	BRL (<0.006)	**17**	NA	BRL (<0.006)	**14.00**	NA
Arsenic	**1**	**10**	0.0065	**95**	NA	BRL (<0.0050)	**95.00**	NA
Cadmium	**2.5**	**5**	BRL (<0.0025)	**6.3**	NA	BRL (<0.0025)	**6.10**	NA
Chromium	**50**	**100**	BRL (<0.006)	**150**	NA	BRL (<0.006)	**80.00**	NA
Copper	**0.5**	**1**	BRL (<0.005)	**450**	NA	BRL (<0.005)	**250.00**	NA
Lead	**1.5**	**15**	BRL (<0.0075)	**200**	NA	BRL (<0.0075)	**100.00**	NA
Mercury	**0.5**	**2**	BRL (<0.0002)	0.073J	NA	BRL (<0.0002)	0.11	NA
Nickel	**50**	**100**	0.005	**340**	NA	BRL (<0.0050)	**250.00**	NA
Zinc	**2.5**	**5**	0.0222	**640**	NA	0.0238	**560**	NA

Notes:
VOCs - Volatile Organic Compounds by EPA Method 8260B (VT Scan)
SVOCs - Semi-Volatile Organic Comounds by EPA Method 8270
13 Priority Pollutant Total Metals by EPA Method 245.1
µg/L- Micrograms per Liter
mg/L - Milligrams per Liter
BRL - Below Reporting Limits. Reporting limit is included in parentheses
Bold and shaded values represent an exceedance of Vermont Primary Groundwater Quality Standards
J = Result is less than Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value
* Sampling 10/18/2006 conducted by Tighe and Bond
NA - Not Analyzed
NS - No Primary Groundwater Quality Standards have been established for these compounds.